BJ-T803 Intelligent Time controller

User Manual

Version：1.1

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Readme

When you use BJ-T803 series Intelligent Time controller, be sure to carefully read this user manual, and be able to fully understand the implications, the correct guidance of operations in accordance with user manual, which will help you make better use BJ-T803 series Intelligent Time controller, and help to solve the various problems at the scene.

1. Before the meter turning on the power supply, be sure that the power supply within the provisions of the controller;

2. When installation, the input terminals must Non-short circuit;

3. Be sure the controller wiring consistent with the internal system settings;

- **Please read carefully before using this user manual**
- **Please save this document**

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1. - SUMMARIZE

BJ-T803 Series Intelligent Time Controller, use the advanced microprocessor, high reliability, error is small, strong stability. With large-capacity relay, can replace control system, independent control street light

Specifically designed for severe weather areas, can control the switch by environment brightness, before and after 90 minutes of the latitude and longitude time.

1. Arithmetic design is according to nation's geography and weather conditions, Earth longitude and latitude and many other factors, such as longitude and latitude.

2. Solid shell design can adapt to the needs of different geographic environment

3. Can be used in lights, beacon lights, neon signs, advertising light and other equipment need time controller;

4. It also widely used in streets, railway, station, sea-route, mining, schools and power supply department.

2. - FEATURES

1. Arithmetic design is according to nation's geography and weather conditions, earth longitude and latitude and many other factors, such as longitude and latitude.

2. Embedded microprocessor, can be used as control unit

3. Solid shell design can adapt to the needs of different geographic environment

4. Use large capacity relay, can directly connected to the load

5. With three operating modes, suit for midnight energy saving mode, 1-rout is Light control mode, 2/3-route is Midnight control mode

6. Widely used in streets, railway, station, sea-route, mining, schools and power supply department

7. Self calibration technology, keep stabilization

8. LCD display, prevent dazzle, highly visible display

3. - SPECIFICATIONS

Power supply	AC220V±30% 50HZ
Power consumption	≤ 2W
Display mode	LCD
Minimum control time	1 min
Clock Accuracy	15S / Year
Relay output	3-route AC220V/20A (Resistive load)
Life expectancy	Mechanical 1,000,000,000 operations min
Protection (TH)	Anti-containing acid, alkali, salt gas
Ambient condition	Temperature: -30～70°C (-22~158℉)
	Relative humidity ＜95%, Non-condensing
Storage Environment	-10～55°C(14~131℉) ; 20 ~ 93%RH ; Noncondensing
Dimension	89.5 × 121× 64.5 mm (3.53x4.77x2.54inch)
Weight	Approx 500g

4.- INSTALLATION

4.1.- Mounting

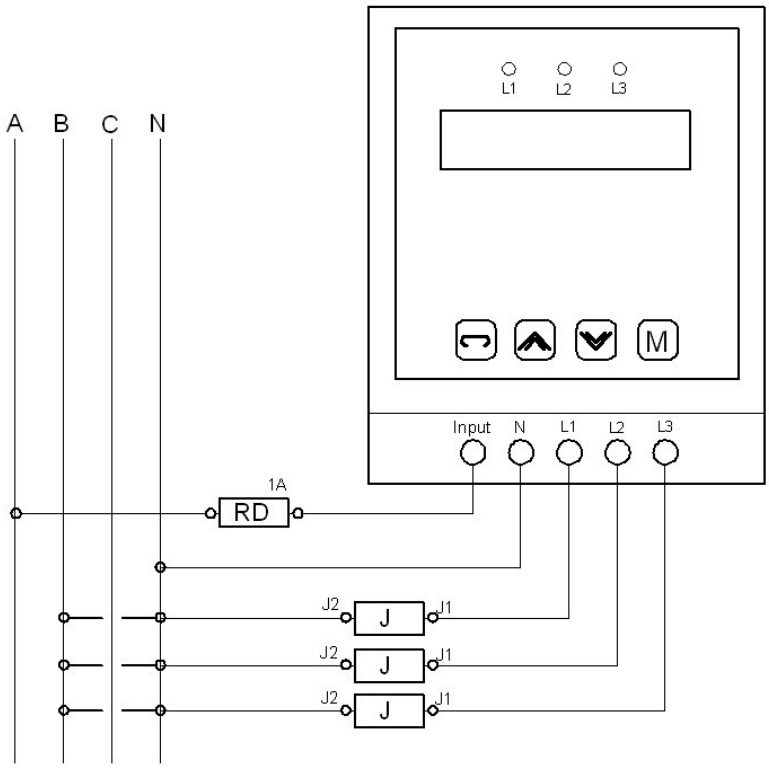
BJ-T803 series time controller is wall mounting, or Horizontal placed in working location

Notes:

Please follow the work environment parameter on chapter **3.- SPECIFICATIONS**

Please ensure there is enough space to place controller

4.2. - Connection drawing for the BJ-T 803



Notes:

1. Please connect the input pin to the A phase, neutral pin connects neutral line (N).

2. Since the street lamp controller doesn't contain fuse, the input needs to connect a 1A fuse

3. If need to use an external relay, the output terminal should connect to relay pin J1, J2 should connect to N, (replay input is 220V); or J2 connect to B(C) phase, (relay input is 380V)

5. - OPERATION MODE

Up key. Press this key to increase values displayed on the display. Hold down this key to speed up the incremental action.

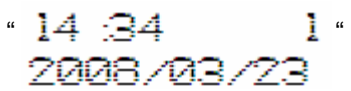
Down key. Press this key to decrease values displayed on the display. Hold down this key to speed up the decrements.

Mode key. Press this key to set parameters within each function mode.

Maintenance. Press this key to turn on/off all relay. And it also has auxiliary function.
Please refer to the section 6.3.1 **Manual mode setting 14Step**

The controller has one display, and three LED type indicators (red colour). It will be on according to the replay output status.

When the controller is powered up, the display shows



means the recent time.

6. - SETUP PROCEDURE

The SETUP procedure of the BJ-T803 is performed by means of several SETUP options.
Once into the SETUP, use the keyboard to select different options and enter required variables:

6.1. - Set time

Step		Display	Meaning	Adjust	Explanation	Value
1	Connect Power Supply	XX :XX 1 20XX/XX/XX	Time : 20XX/XX/XX	Press ^ v	Display turn on time , and turn off time	ON XX:XX OFF XX:XX
2	Press ↩	XX :XX 1 20XX/XX/XX	Adjust hours	Press ^ v	Set Hours	0~23
3	Press ↩	XX :XX 1 20XX/XX/XX	Minute	Press ^ v	Set Minutes	0~59
4	Press ↩	XX :XX 1 20XX/XX/XX	Year	Press ^ v	Set Years	
5	Press ↩	XX :XX 1 20XX/XX/XX	Month	Press ^ v	Set Month	1~12
6	Press ↩	XX :XX 1 20XX/XX/XX	Date	Press ^ v	Set Date	1~31

6.2.- Choose the output route

Please follow the step 6 on chapter **6.1.- Set time**

Step		Display	Meaning	Adjust	Explanation	Value
7	Press ↩	Output-X Mode-X	Output Route	Press ^ v	Choose the output route	1, 2, 3

Choose " Output-1 "

Means route-1 output

Choose " Output-2 " / " Output-3 "

Means separate control route-2 or route-3 turn off time

6.3.- Choose the mode

Step	Display	Meaning	Adjust	Explanation	Value
8	Output-X Mode-X	Control Mode	Press ⩓⩔	Choose control mode 0	Mode-0

“ Mode-0 ”

Manual Mode, user can set the turn on and turn off time

Please refer to the section 6.3.1 **Manual mode setting**

Step	Display	Meaning	Adjust	Explanation	Value
8	Output-X Mode-X	Control Mode	Press ⩓⩔	Choose control mode 1	Mode-1

“ Mode-1 ”

Automatic Mode, controller switch act depends on local latitude and longitude

Please refer to the section 6.3.2**- Automatic mode setting**

6.3.1- Manual mode setting

Please follow Step 8 on chapter 6.3**- Choose the mode**

The operational processes as follow:

Step		Display	Meaning	Adjust	Explanation	Value
9	Press	XX Open XX:XX Close XX:XX	Choose turn on/off control mode	Press ∧∨	Choose control value(month)	1~12
10	Press	XX Open XX:XX Close XX:XX	Choose turn on control point(hour)	Press ∧∨	Set turn on value	00-23
11	Press	XX Open XX:XX Close XX:XX	Choose turn on control point(minute)	Press ∧∨	Set turn on value	00-59
12	Press	XX Open XX:XX Close XX:XX	Choose turn on control point(hour)	Press ∧∨	Set turn off value	00-23
13	Press	XX Open XX:XX Close XX:XX	Choose turn on control point(minute)	Press ∧∨	Set turn off value	00-59
14	Press M	2 Close XX:XX 3 Close XX:XX	Choose Route-2,Route-3 turn off point(hour)	Press ∧∨	Set Route-2 turn off value	00-23
15	Press	2 Close XX:XX 3 Close XX:XX	Choose Route-2,Route-3 turn off point(minute)	Press ∧∨	Set Route-2 turn off value	00-59
16	Press	2 Close XX:XX 3 Close XX:XX	Choose Route-2,Route-3 turn off point(hour)	Press ∧∨	Set Route-3 turn off value	00-23
17	Press	2 Close XX:XX 3 Close XX:XX	Choose Route-2,Route-3 turn off point(minute)	Press ∧∨	Set Route-3 turn off value	00-59
18	Press	XX XX 0 20XX/XX/XX	Time : 20XX/XX/XX		Reture to time	

Note: Step 14-17 is effective that choose route**-2 / route-3 in step 7**

Please refer to the section **6.2.- Choose the output route**

6.3.2- Automatic mode setting

Please follow Step 8 on chapter 6.3- **Choose the mode**

The operational processes as follow:

Step		Display	Meaning	Adjust	Explanation	Value
9	Press	EastLongitude XXX NorthLatitude XX	Set Longitude	Press ∧∨	Input longitude data	71~140
10	Press	EastLongitude XXX NorthLatitude XXX	Set latitude	Press ∧∨	Input latitude data	19~50
11	Press	Open XX Close XX	Adjust turn on time	Press ∧∨	Based on the latitude and longitude control, adjust turn on time	-90~90
12	Press	Open XX Close XX	Adjust turn off time	Press ∧∨	Based on the latitude and latitude control, adjust turn off time	-90~90
13	Press	2 Close XX:XX 3 Close XX:XX	Choose Route-2/Route-3 turn off point(hour)	Press ∧∨	Set Route-2 turn off value	00-23
14	Press M	2 Close XX:XX 3 Close XX:XX	Choose Route-2/Route-3 turn off point(minute)	Press ∧∨	Set Route-2 turn off value	00-59
15	Press	2 Close XX:XX 3 Close XX:XX	Choose Route-2/Route-3 turn off point(hour)	Press ∧∨	Set Route-3 turn off value	00-23
16	Press	2 Close XX:XX 3 Close XX:XX	Choose Route-2/Route-3 turn off point(minute)	Press ∧∨	Set Route-3 turn off value	00-59
17	Press	XX:XX 1 20XX/XX/XX	Time : 20XX/XX/XX		Return to time	

Note: Step 13-16 is energy-saving control, effective that choose **route-2 / route-3 in step 7**

Please refer to the section **6.2.- Choose the output route**

The longitude and latitude show above is for the Chinese user, these can be adjusted to the user's requirement.

7. - SAFETY CONSIDERATIONS

All installation specification described at the previous chapters named: **SPECIFICATIONS, INSTALLATION, OPERATION MODE, and SETUP PROCEDURE**

Note that with the controller powered on, the terminals could be dangerous to touch. This controller is factory-shipped at proper operation condition.

8. - MAINTENANCE

The BJ-803 series does not require any special maintenance. No adjustment, maintenance or repairing action should be done when the controller open and powered on, should those actions are essential, high-qualified operators must perform them.

Before any adjustment, replacement, maintenance or repairing operation is carried out, the controller must be disconnected from any power supply source.

When any protection failure is suspected to exist, the controller must be immediately put out of service. The controller's design allows a quick replacement in case of any failure.